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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,156	02/08/2001	Ursula Murschall	00/053 MFE	4234
38263	7590	12/15/2004	EXAMINER	
PROPAT, L.L.C.			FERGUSON, LAWRENCE D	
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CHARLOTTE, NC 28211-2841			PAPER NUMBER	
			1774	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/779,156

Applicant(s)

MURSCHALL ET AL.

Examiner

Lawrence D. Ferguson

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. This action is in response to the amendment, mailed October 1, 2004. Claims 1 and 20 were amended and claims 12-15 were cancelled rendering claims 1-11 and 16-20 pending. The terminal disclaimer filed October 1, 2004, has been received.

### *Claim Rejections – 35 USC § 103(a)*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 9-11 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (U.S. 5,660,931) in view of Peiffer et al. (U.S. 6,641,924).

Kim shows a white film (base layer) comprising polyethylene terephthalate (crystallizable thermoplastic), barium sulfate (column 2, lines 3-9), and bisbenzoazole (optical brightener) (column 5, lines 13-22) where white film has a thickness of 12micrometers (column 9, lines 11-16). Kim shows that the rutile-type titanium dioxide has an average particle diameter ranging from 0.1 to 3 micrometers (column 2, lines 54-55) and the degree of whiteness of the film is greater than 85% (Table 2). Kim shows that the film may comprise additives (column 6, lines 59-65). Though Kim shows that the bisbenzoazole is added in an amount so that the reflectivity at 440 nm becomes

greater than 75% (column 5, lines 21-22), Kim does not show that the bisbenzoazole is 10-50,000 ppm of the weight of the crystallizable thermoplastic as in instant claim 4. In instant claim 1, the phrase "wherein the luminous transmittance of the film is reduced when the longitudinal stretch ratio is increased for a film of the same thickness" constitutes a 'capable of' limitation and that such a recitation that an element is 'capable of' performing a function is not a positive limitation but only requires the ability to so perform. Kim does not show the percentage by weight as in instant claims 3, 7, and 11. Kim does not show the thickness as in instant claim 10. However, such concentrations, percentages by weight, and thicknesses are properties which can be easily determined by one of ordinary skill in the art. With regard to the limitation of the concentrations, percentages by weight, and thicknesses, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. concentrations, percentages by weight, thicknesses) fails to render claims patentable in the absence of unexpected results. All of the aforementioned limitations are result effective as they control the amount of light transmitted, transparency, and reflectiveness of the film. As such, they are optimizable. While Kim shows that polyethylene glycol is provided to impart an improved anti-static and printability functionality to the surface of the film (surface coating), Kim does not specifically show a separate coating to impart a functionality as in instant claim 1. The invention of Kim already has the desired functionality of for example, printability and antistatic properties, which Applicants attempt to achieve by a separate coating.

However, the mere duplication of parts (i.e. functional layer) has no patentable significance unless a new and unexpected result is produced. Kim does not show that the white film is opaque as in instant claims 1-5 and 9-10, however, the relative level of opacity is a property which can be easily determined by one of ordinary skill in the art by adjusting the concentration of the white pigments and thicknesses. Opacity is a result effective parameter and thus, is optimizable. With regard to the limitation of the opacity, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. opacity) fails to render claims patentable in the absence of unexpected results. Claims 1, 3, 4 and 10 are also rejected because they are product-by-process claims. The phrases "where the barium sulfate or the optical brightener. . . is either incorporated directly into. . . or fed as a masterbatch during film production" and in claim 10, "coating has been applied as. . ." introduces process limitations to the product claim. The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art, the claims are unpatentable even though the prior art was made by a different process. MPEP 2113. Further, process limitations are given no patentable weight in product claims. Kim does not teach the white film comprising regrind.

Peiffer teaches an opaque white polyester film comprising regenerated material (regrind) in an amount of from about 10 to 70% by weight (column 2, line 62 through column 3, line 4 and claims 1, 8 and 9) comprising thermoplastic polyester (column 4,

lines 43-44) and antiblocking agents such as barium sulfate (column 8, lines 31-35). Kim and Peiffer are analogous art as they are both directed to white films. It would have been obvious to one of ordinary skill in the art to include regrind in the film of Kim because Peiffer teaches using regenerated material decreases the cost of the film and does not have any negative effect on the physical property of the film (column 2, line 62 through column 3, line 4). The opaque white film of Kim in view of Peiffer would be expected to have lower luminous transmittance than a comparable film because it comprises regrind similar to the claimed film, which would result in a lower luminous transmittance than comparable films, absent any evidence to the contrary.

***Claim Rejections – 35 USC § 103(a)***

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (U.S. 5,60,931) in view of Peiffer further in view of von Meer (U.S. 4,384,040).

Kim and Peiffer are relied upon as above for claim 1. Kim does not show the blue dye and amount of blue dye as in instant claim 6. ' However, the amount of blue dye is a property which can be easily determined by one of ordinary skill in the art in order to enhance the whiteness of the film. With regard to the limitation of the amount of blue dye, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. Since the blue dye directly affects the whiteness of the film, it is an optimizable feature. The experimental modification of prior art in order to optimize operation conditions (e.g. amount of blue dye) fails to render claims patentable in the absence of unexpected

results. Von Meer shows a photographic paper wherein the white titanium dioxide pigmented paper is dyed with cobalt blue or ultramarine (column 3, line 68 to column 4, line 25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to cobalt blue or ultramarine in addition to the whitening titanium dioxide because it is known that cobalt blue and ultramarine is used to enhance the whiteness and to compensate for the yellowish tint of the invention. Kim does not show that the white film is opaque as in instant claim 6,. however, the level of opacity is a property which can be easily determined by one of ordinary skill in the art by adjusting the concentration of the white pigments and thicknesses. Opacity is a result effective parameter and thus, is optimizable. Opacity is a result effective parameter and thus, is optimizable. With regard to the limitation of the opacity, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. opacity) fails to render claims patentable in the absence of unexpected results.

5. Claim 20 is allowed. The closest prior art does not teach or suggest the recited opaque, white film further including a modulus of elasticity in the machine direction of at least 3300 N/mm<sup>2</sup> and in the traverse direction of greater than or equal to 4200 N/mm<sup>2</sup>; tear strengths in the machine direction of greater than or equal to 120 N/mm<sup>2</sup> and in the traverse direction of greater than or equal to 170 N/mm<sup>2</sup> and elongations at break of greater than or equal to 120% in the machine direction and greater than or

equal to 50% in the traverse direction. The prior art does not teach motivation or suggestion for modification to make the invention as instantly claimed.

### ***Response to Arguments***

6. The obviousness-type double patenting rejection is withdrawn due to Applicant filing a Terminal Disclaimer over Patent No. 6,521,351.

Arguments to rejection made under 35 U.S.C. 103(a) as being unpatentable over Kim (U.S. 4,933,043) in view of Peiffer et al. (U.S. 6,641,924) have been considered but are unpersuasive. Applicant argues Kim teaches away from the instant invention with the presence of polyolefin in its films. There is no express teaching in Kim et al that the polyolefin is crystallizable. Therefore the claim limitation of "wherein said crystallizable thermoplastic consists entirely of polyester" would not exclude polyolefin. Furthermore, Applicant claims "an opaque, white film with a thickness of from 10 to 500um, wherein the film comprises a crystallizable thermoplastic. Because the preamble of instant claim 1 has the comprising claim language, the polyolefin component of Kim is not excluded a component regarding the instantly claimed invention. Applicant further argues Kim does not teach or suggest the recited reduction in luminous transmittance with increasing longitudinal stretch ratios. In instant claim 1, the phrase "wherein the luminous transmittance of the film is reduced when the longitudinal stretch ratio is increased for a film of the same thickness" constitutes a 'capable of' limitation and that such a recitation

that an element is 'capable of' performing a function is not a positive limitation but only requires the ability to so perform.

In response to applicant's argument that Peiffer teaches away from the instant invention by teaching COC as a whitening agent within the film, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Peiffer is used simply to teach the conventionality of regrind in white films to lower luminous transmittance.

In instant claim 16, the phrase, "said crystallizable thermoplastic consists essentially of polyester" is construed as "comprising" claim language. Therefore, Applicant's claims would include the polyolefin as taught by Kim et al. The transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. In *re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). For the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." See, e.g., *PPG*, 156 F.3d at 1355, 48 USPQ2d at 1355. If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction

of additional steps or components would materially change the characteristics of applicant's invention. In re De Lajarte, 337 F.2d 870, 143 USPQ 256.

Arguments to rejection made under Kim (U.S. 5,60,931) in view of Peiffer further in view of von Meer (U.S. 4,384,040) are maintained for reasons of record.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-

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272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lawrence D. Ferguson  
Examiner  
Art Unit 1774



RENA DYE  
SUPERVISORY PATENT EXAMINER

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